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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,043	07/31/2001	Samuel Lim	PD-01-027	4260

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Gates & Cooper LLP
Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, CA 90045

EXAMINER	
LEE, JOHN J	

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/919,043	LIM, SAMUEL	
	Examiner	Art Unit	
	JOHN J LEE	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,12-14 and 23-26* is/are rejected.

7)☒ Claim(s) *4-11 and 15-22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-3, 12-14, and 23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. (US Patent number 6,650,869) in view of Okunishi et al. (US 2001/0048672).

Regarding **claims 1 and 12**, Kelly discloses that a method of providing digital data to a data reception device (101 in Fig. 1) (column 4, lines 53 – column 5, lines 14). Kelly teaches that operating the data reception device (101 in Fig. 1 such as PDA, cellular phone), in a wireless communication network (Fig. 1) comprising a plurality of terrestrial receivers (111 in Fig. 1) and terrestrial transmitters (113 in Fig. 1), each serving a service region (Fig. 1) (column 4, lines 53 – column 5, lines 67, and Fig. 1, where teaches operating data reception device (PDA, cellular phone) in wireless satellite communication, there are a plurality of terrestrial receivers and terrestrial transmitters, each one has own serving coverage area). Kelly teaches that receiving at least a portion of the digital data (digital package multicast delivery, could be portion of data) in a satellite receiver (111 in Fig. 1) via a satellite communication system (Fig. 1) (column 5, lines 38 – column 6, lines 14 and Fig. 1, where teaches the satellite system broadcasts digital multimedia service to a satellite receiver (111), could be part of the digital data to send to

receiver in satellite communication system). Kelly teaches that providing the received portion of the digital data (digital multimedia service) to at least one of the terrestrial transmitters (113 in Fig. 1) (column 5, lines 15 – column 6, lines 14 and Fig. 1, where teaches the satellite system transmits digital multimedia service to a satellite receiver (109) through terrestrial transceivers for transmitting the digital data to reception device for servicing within each service area). Kelly teaches that transmitting the received portion of the digital data to the data reception device (101 in Fig. 1) within the service region using the terrestrial transmitter (column 5, lines 15 – column 6, lines 14 and Fig. 1, where teaches the transceiver provides the digital data to the data reception device within the service coverage area).

Kelly does not specifically disclose the limitation "transmitting a remainder of the digital portion of data via the wireless communication network". However, Okunishi teaches the limitation "transmitting a remainder of the digital portion of data via the wireless communication network" (Fig. 4, 6, pages 3, paragraphs 29, and page 1, paragraphs 9 – pages 2, paragraphs 13, where teaches the master station notifies to slave stations for delivering the portion or part of communication data (see Fig. 3), and the slave station transmits response data to notify the master station that the portion of communication data has been successfully received and also transmits request channel assignment signal to master station, and the master station informs the channel assignment signal has been grant to slave station). It would have been obvious to one having ordinary skill in the art at the time the invention was to modify the Kelly system

as taught by Okunishi, provide the motivation to achieve enhancing data reception and data adaptability in satellite communication system.

Regarding **claim 2**, Kelly discloses that the satellite receiver (109 in Fig. 1) is communicatively coupled to the terrestrial transmitter (113 in Fig. 1) (column 5, lines 15 – column 6, lines 14 and Fig. 1, 2, where teaches the satellite receiver communicates with the terrestrial transmitter).

Regarding **claims 3, 14, and 24**, Kelly discloses that the wireless communication network is a cellular telephone network (Fig. 1 and column 4, lines 53 – column 5, lines 14, where teaches the data reception device could be cellular telephone).

Regarding **claim 13**, Kelly and Okunishi disclose all the limitation, as discussed in claims 1 and 2.

Regarding **claim 15**, Kelly and Okunishi disclose all the limitation, as discussed in claims 1 and 4.

Regarding **claim 23**, Kelly and Okunishi disclose all the limitation, as discussed in claims 1 and 12. Furthermore, Kelly further discloses that a satellite antenna (111 in Fig. 1), for receiving a signal from a satellite (107) (Fig. 1 and column 4, lines 53 – column 5, lines 15). Kelly teaches that a satellite receiver (109 in Fig. 1) communicatively coupled to the satellite antenna (111 in Fig. 1) for detecting and demodulating the signal to produce the portion of the digital data, the satellite receiver communicatively coupled to the terrestrial transmitter (column 39, lines 19 – column 40, lines 32, Fig. 4, 9, and column 12, lines 17 - 65, where teaches the satellite antenna

receives and detects the communication data, and demodulator demodulates the data and produces the data).

Regarding **claim 25**, Kelly teaches that the satellite antenna is disposed within the service region (column 39, lines 19 – column 40, lines 32 and Fig. 1, 9).

Regarding **claim 26**, Kelly teaches that the satellite antenna is disposed proximate the terrestrial transmitter (Fig. 1, 9 and column 39, lines 19 – column 40, lines 32, the satellite receiving antenna located at terrestrial transmitter).

Allowable Subject Matter

3. Claims 4-11 and 15-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose "determining if a transmission requirement of the digital data exceeds a capacity of the wireless communication network, and performing the steps that received at least a portion of digital data in a satellite receiver, provides the received portion of digital data to at least one of the terrestrial transmitters, and transmitting the received portion of digital data to the data reception device within the service region using the transmitter while transmitting a remainder of the digital data via wireless communication network, only if the transmission requirements of the digital data exceed the capacity of the wireless communication network" as specified in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vanden Heuvel et al. (US Patent number 5,924,014) discloses Adaptive Routing in a Satellite-Based Communication System.

Black et al. (US Patent number 6,493,538) discloses Data Communication Satellite System and Method of Carrying Multi-Media Traffic.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

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or faxed (703) 308-9051, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on **(571) 272-7882**. Any inquiry of a general nature or

relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
May 12, 2005

NAY MAUNG
SUPERVISORY PATENT EXAMINER

John J Lee